

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

--Claim 1. (Currently Amended) A wireless transmitting method for forming a wireless network using a plurality of communicating devices to carry out asynchronous transmission of information, the method comprising the steps of:

building a monopayload packet having one of predetermined information units of the information for transmission as a data payload,

constituting a multipayload packet having a plurality of the predetermined information units of the information for transmission as a data payload,

adding a predetermined preamble to form a monopayload wireless packet to the monopayload packet and to the multipayload packet to form a multipayload wireless packet, and

carrying out the asynchronous transmission by a wireless transmission packet obtained by combining the monopayload wireless packet with the multipayload wireless packet depending on a length of the information to be asynchronously transmitted by the wireless network, wherein when the wireless transmission packet is received and the first information unit is carried out, the reception and

processing of subsequent information units is contingent on it being decided that the data payload should continue, and

adding an error detection code or an error correction code to the monopayload packet and the multipayload packet by said information unit for transmission, whereby retransmission is required for each information unit having an error.

--Claim 2. (Canceled)

--Claim 3. (Previously Presented) The wireless transmitting method according to claim 1, further comprising the steps of adding common header information to the monopayload packet and the multipayload packet and decoding the header information to make a state of succeeding data payload packets decidable by a communicating station of destination.

--Claim 4. (Previously Presented) The wireless transmitting method according to claim 1, further comprising the step of describing a number of predetermined information units included in the multipayload packet as common header information in the multipayload packet so that the number of continuous information units is specified.

--Claim 5. (Previously Presented) The wireless transmitting method according to claim 1, further comprising the step of adding a sequence number to the monopayload packet and obtaining the multipayload packet by adding the number for each increase in the information unit included in the packet.

--Claims 6-8. (Canceled)

--Claim 9. (Currently Amended) A wireless transmitter for forming a wireless network to carry out asynchronous transmission of information by using a plurality of communicating devices, the transmitter comprising:

dividing means for dividing the information for transmission by the wireless network into predetermined information units,

monopayload packet building means for building a monopayload packet having one of the predetermined information units of the information for transmission as a data payload,

multipayload packet building means for building a multipayload packet having a plurality of the predetermined information units of the information for transmission as a data payload,

header adding means for adding header information describing a type of payload packet to the monopayload packet and to the

multipayload packet,

wireless packet building means for building a wireless transmission packet by combining a wireless monopayload packet with a wireless multipayload packet depending on a length of the asynchronous information to be transmitted by the wireless network,

preamble adding means for adding a predetermined preamble to the monopayload packet to form the monopayload wireless packet and to the multipayload packet to form the multipayload wireless packet, and

access control means for carrying out wireless transmission control using the preamble information by an access control signal sent from a control station, whereby the wireless transmission packet is transmitted by the wireless network using the access control means, wherein when the wireless transmission packet is received and the first information unit is carried out, the reception and processing of subsequent information units is contingent on it being decided that the data payload should continue, and

error adding means for adding an error detection code or an error correction code to the monopayload packet and the multipayload packet by said information unit for transmission, whereby retransmission is required for each information unit having an error.

--Claim 10. (Canceled)

--Claim 11. (Previously Presented) The wireless transmitter according to claim 9, further comprising

receiving means for receiving an access control signal sent from a control device of the wireless network,

access control signal decoding means for decoding the access control signal, and

deciding means for deciding that the relevant access control signal is for its own station,

whereby the wireless transmission of the wireless packet is started using the deciding means.

Claims 12-13. (Canceled)